Complete Summary

GUIDELINE TITLE

Apnea, sudden infant death syndrome, and home monitoring.

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics. Apnea, sudden infant death syndrome, and home monitoring. Pediatrics 2003 Apr;111(4 Pt 1):914-7. [35 references] PubMed

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

- Sudden infant death syndrome (SIDS)
- Apnea of prematurity
- Apnea and/or bradycardia of infancy

GUIDELINE CATEGORY

Prevention
Risk Assessment

CLINICAL SPECIALTY

Family Practice
Pediatrics
Preventive Medicine

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

To provide recommendations regarding the appropriate use of home cardiorespiratory monitoring after hospital discharge in at-risk newborns

TARGET POPULATION

- Newborn through children age 1
- Infants with the following indications:
    - Infants who have experienced an apparent life-threatening event (ALTE)
    - Infants with tracheostomies or anatomical abnormalities that make them vulnerable to airway compromise
    - Infants with neurologic or metabolic disorders affecting respiratory control
    - Infants with chronic lung disease (bronchopulmonary dysplasia), especially those requiring supplemental oxygen, continuous positive airway pressure, or mechanical ventilation

INTERVENTIONS AND PRACTICES CONSIDERED

Home cardiorespiratory monitoring

MAJOR OUTCOMES CONSIDERED

- Efficacy of home cardiorespiratory monitoring
- Incidence of sudden infant death syndrome (SIDS)
- Risk of sudden infant death syndrome

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Not stated

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Not stated

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Not applicable

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

1. Home cardiorespiratory monitoring should not be prescribed to prevent sudden infant death syndrome (SIDS).
2. Home cardiorespiratory monitoring may be warranted for premature infants who are at high risk of recurrent episodes of apnea, bradycardia, and hypoxemia after hospital discharge. The use of home cardiorespiratory monitoring in this population should be limited to approximately 43 weeks´ postmenstrual age or after the cessation of extreme episodes, whichever comes last.
3. Home cardiorespiratory monitoring may be warranted for infants who are technology dependent (tracheostomy, continuous positive airway pressure), have unstable airways, have rare medical conditions affecting regulation of breathing, or have symptomatic chronic lung disease.
4. If home cardiorespiratory monitoring is prescribed, the monitor should be equipped with an event recorder.
5. Parents should be advised that home cardiorespiratory monitoring has not been proven to prevent sudden unexpected deaths in infants.

6. Pediatricians should continue to promote proven practices that decrease the risk of SIDS--supine sleep position, safe sleeping environments, and elimination of prenatal and postnatal exposure to tobacco smoke.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is not specifically stated for each recommendation.

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Home cardiorespiratory monitoring may be justified to allow rapid recognition of apnea, airway obstruction, respiratory failure, interruption of supplemental oxygen supply, or failure of mechanical respiratory support. Infants for who these indications may apply include:

- Infants who have experienced an apparent life-threatening event (ALTE)
- Infants with tracheostomies or anatomical abnormalities that make them vulnerable to airway compromise
- Infants with neurologic or metabolic disorders affecting respiratory control
- Infants with chronic lung disease (bronchopulmonary dysplasia), especially those requiring supplemental oxygen, continuous positive airway pressure, or mechanical ventilation

POTENTIAL HARMS

Not stated

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

American Academy of Pediatrics. Apnea, sudden infant death syndrome, and home monitoring. Pediatrics 2003 Apr;111(4 Pt 1):914-7. [35 references] PubMed

ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2003 Apr

GUIDELINE DEVELOPER(S)

American Academy of Pediatrics - Medical Specialty Society

SOURCE(S) OF FUNDING

American Academy of Pediatrics

GUIDELINE COMMITTEE

Committee on Fetus and Newborn

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Committee on Fetus and Newborn, 2002-2003: Lillian R. Blackmon, MD (Chairperson); Daniel G. Batton, MD; Edward F. Bell, MD; William A. Engle, MD; William P. Kanto, Jr, MD; Gilbert I. Martin, MD; Warren N. Rosenfeld, MD; Ann R. Stark, MD

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Staff: Jim Couto, MA

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FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

American Academy of Pediatrics (AAP) Policies are reviewed every 3 years by the authoring body, at which time a recommendation is made that the policy be retired, revised, or reaffirmed without change. Until the Board of Directors approves a revision or reaffirmation, or retires a statement, the current policy remains in effect.

GUIDELINE AVAILABILITY

Electronic copies: Available from the American Academy of Pediatrics (AAP) Policy Web site.

Print copies: Available from American Academy of Pediatrics, 141 Northwest Point Blvd., P.O. Box 927, Elk Grove Village, IL 60009-0927.

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI on August 18, 2003. The information was verified by the guideline developer on September 8, 2003.

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